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Ameritech

Celia Nogales
Director - Federal Relations

October 6, 1997

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW
Room 222
Washington, DC 20554

RE: **Ex Parte Presentation**
CC Docket No. 96-115

Dear Mr. Caton:

On October 6, 1997, Mr. Mike Pabian, Mr. Brian Gilomen and I met with Ms. Dorothy Atwood, Ms. Tonya Rutherford, Mr. Daniel Shiman, Ms. Lisa Choi, and Ms. Raelynn Tibayan of the Policy and Program Planning Division to discuss Ameritech's position in the above referenced docket. The attached material was used as part of our discussion.

Sincerely,

Celia Nogales

Attachment
cc: D. Atwood
T. Rutherford
D. Shiman
L. Choi
R. Tibayan

AMERITECH EX PARTE PRESENTATION

TO THE

FEDERAL COMMUNICATIONS COMMISSION

TELECOMMUNICATIONS CARRIERS' USE OF

CUSTOMER PROPRIETARY NETWORK INFORMATION

CC DOCKET NO. 96-115

OCTOBER 6, 1997

EXECUTIVE SUMMARY

In its Notice of Proposed Rulemaking (NPRM) in CC Docket No. 96-115, the Federal Communications Commission (Commission) seeks comment on proposed regulations to specify and clarify the obligations of telecommunications carriers with respect to the use and protection of customer proprietary network information (CPNI). Among other issues, the Commission invites comment on the type of safeguards that telecommunications carriers must implement to protect against unauthorized access to CPNI by their employees or agents; the characterization of the term "telecommunications services" as used in Section 222 of the Telecommunications Act of 1996 (the Act); and applicable CPNI notice and authorization requirements.

In this Ex Parte presentation, Ameritech provides detail supporting why the Commission:

- Should not require a computerized/mechanized information blocking approach to implement the Act's CPNI safeguards. Mechanized safeguards will result in significant customer dissatisfaction, and in the case of Ameritech's residential consumer unit alone are estimated to cost more than $44 million for initial necessary systems/technology additions and upgrades, with additional annual expenditures of over $20 million due to increased human resources requirements and software and desktop systems support. A nonmechanized approach fully compliant with the Act's requirements should be implemented instead.

- Should broadly define the term "telecommunications services." Defining the term in a granular fashion, with multiple service-specific "buckets," will drive the customer dissatisfaction noted above and will exacerbate the costs.

- Should not require burdensome CPNI notification and authorization requirements. Data indicates that, when asked, nine out of ten residential customers consent to the broad use of CPNI in conjunction with products unrelated to the "telecommunications services" included in the Commission's tentative definition. This suggests that privacy concerns do not warrant extensive notification and written authorization requirements.

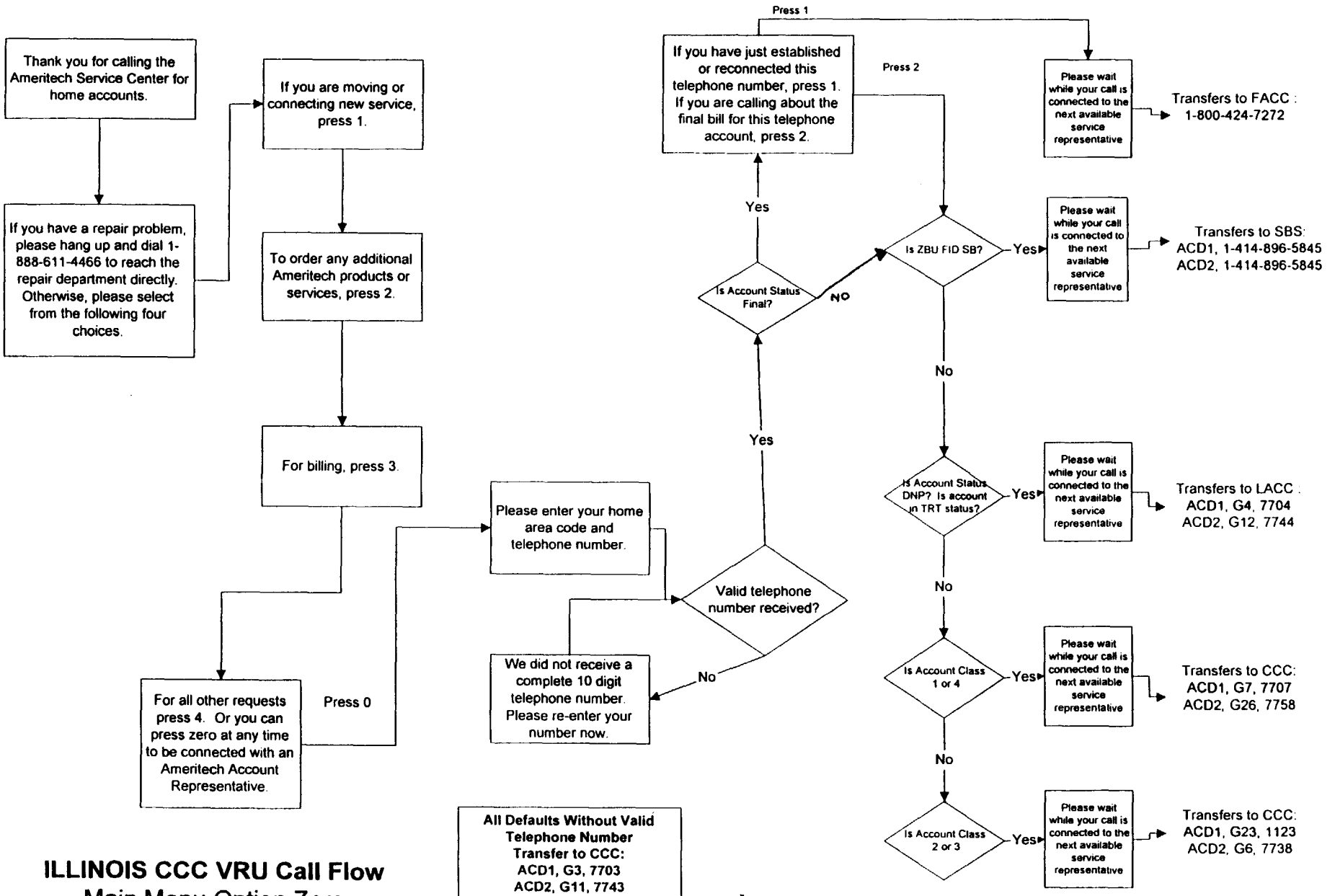
BACKGROUND RELATING TO CUSTOMER DISSATISFACTION AND COST

Call flow diagrams can aid the understanding of how incoming calls would be handled under various CPNI restriction scenarios. In the pages that follow, Ameritech discusses three call flow diagram sets.

Set #1 provides historic background, depicting the complicated Voice Response Unit (VRU) call flow employed earlier this year by Ameritech's residential consumer unit. This call flow resulted in so much customer dissatisfaction that it was replaced by a streamlined approach. This streamlined approach -- depicted in Set #2 and in use today -- generates much less customer annoyance. Nonmechanized CPNI restrictions implemented by rigorous training and appropriate methods and procedures could be implemented consistent with streamlined call flows. By contrast, Set #3 depicts Ameritech's assumption of call flows associated with mechanized CPNI blocking. As will be seen, such an approach would cost tens of millions of dollars to implement and would cause even greater customer dissatisfaction than that associated with the now-discontinued Set #1.

Call Flow Diagram Set #1

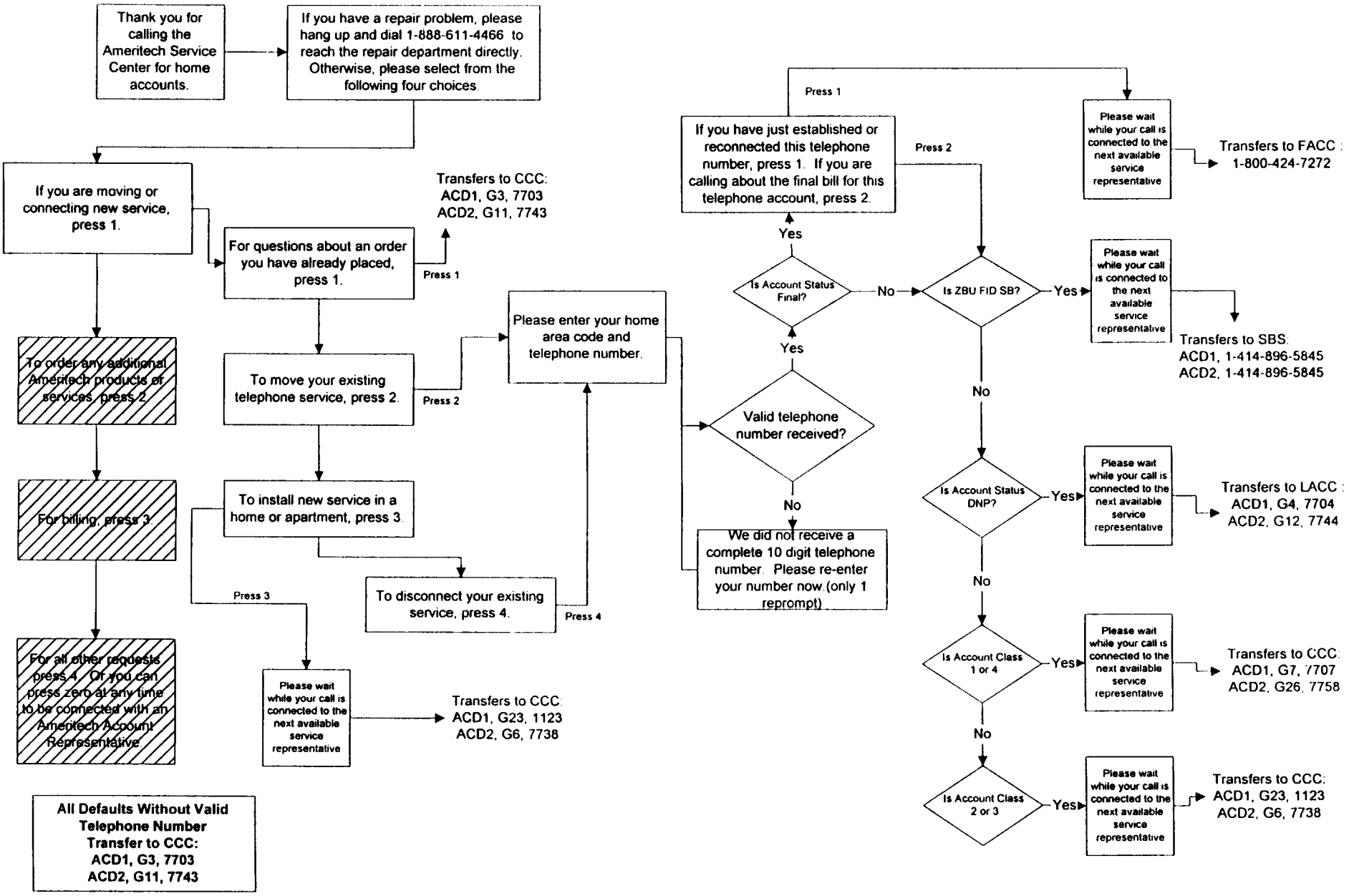
The following call flow diagrams depicts the Voice Response Unit (VRU) prompts used by Ameritech's residential consumer unit during the first half of 1997. The pages reflect the flow associated with selecting the "zero-out" option and VRU options one through four, respectively. Surveys indicated a very high -- 30 percent or more -- customer dissatisfaction level with this VRU design. In addition, 40 percent of all callers were so annoyed by the design that they bypassed the VRU by "zeroing out" from the system so as to reach a live representative.



ILLINOIS CCC VRU Call Flow

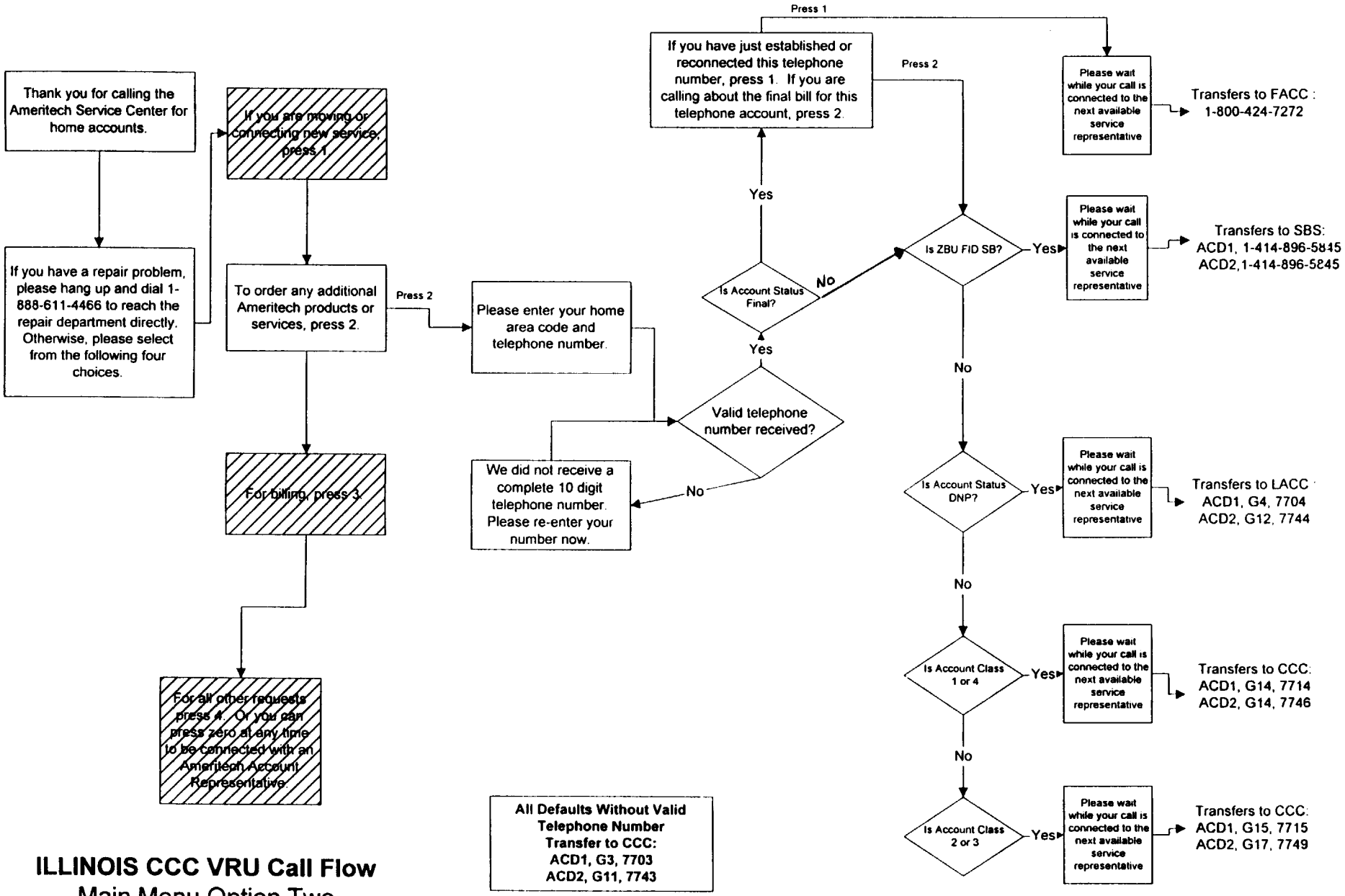
Main Menu Option Zero

VRU #1



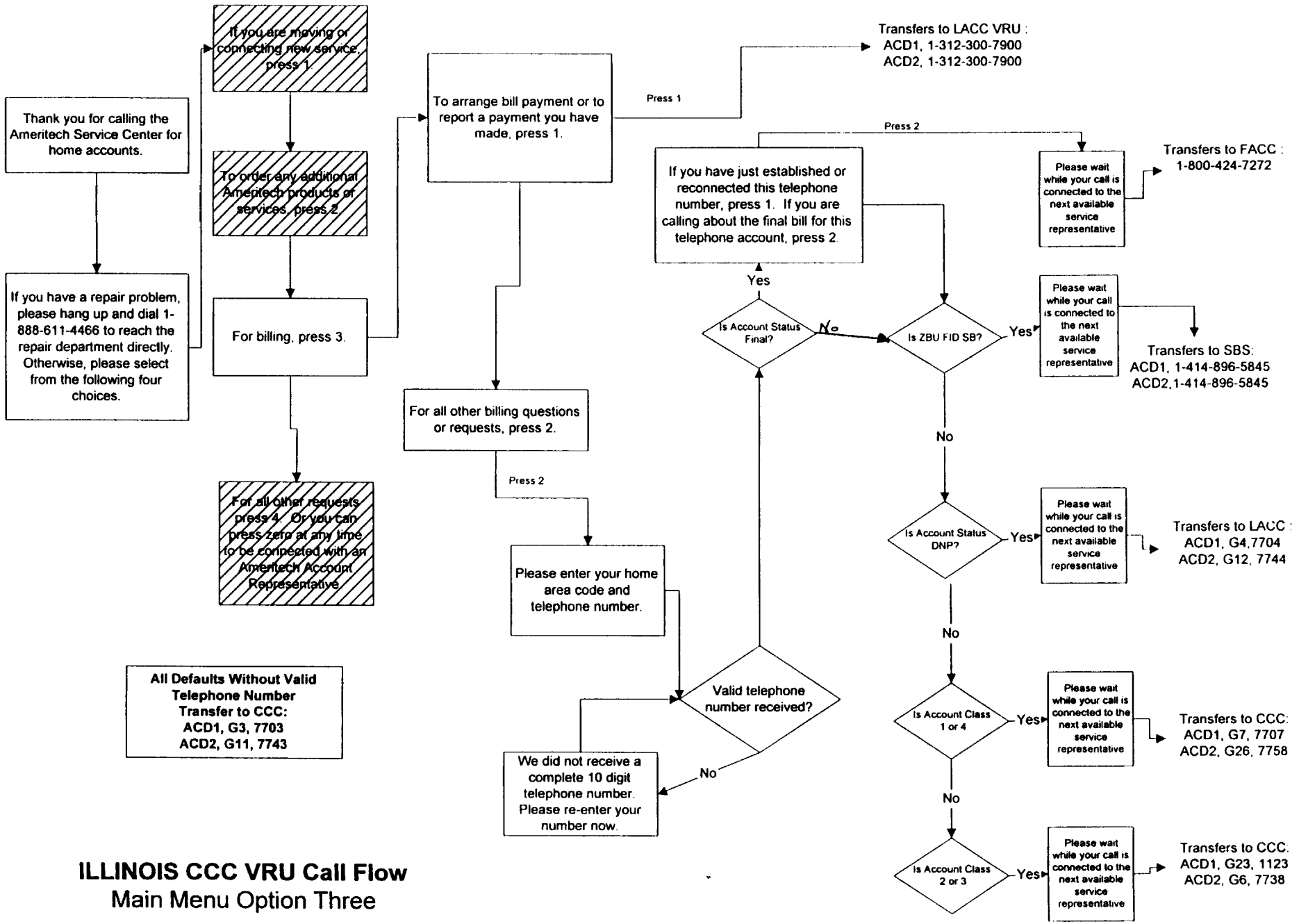
ILLINOIS CCC VRU Call Flow

Main Menu Option One

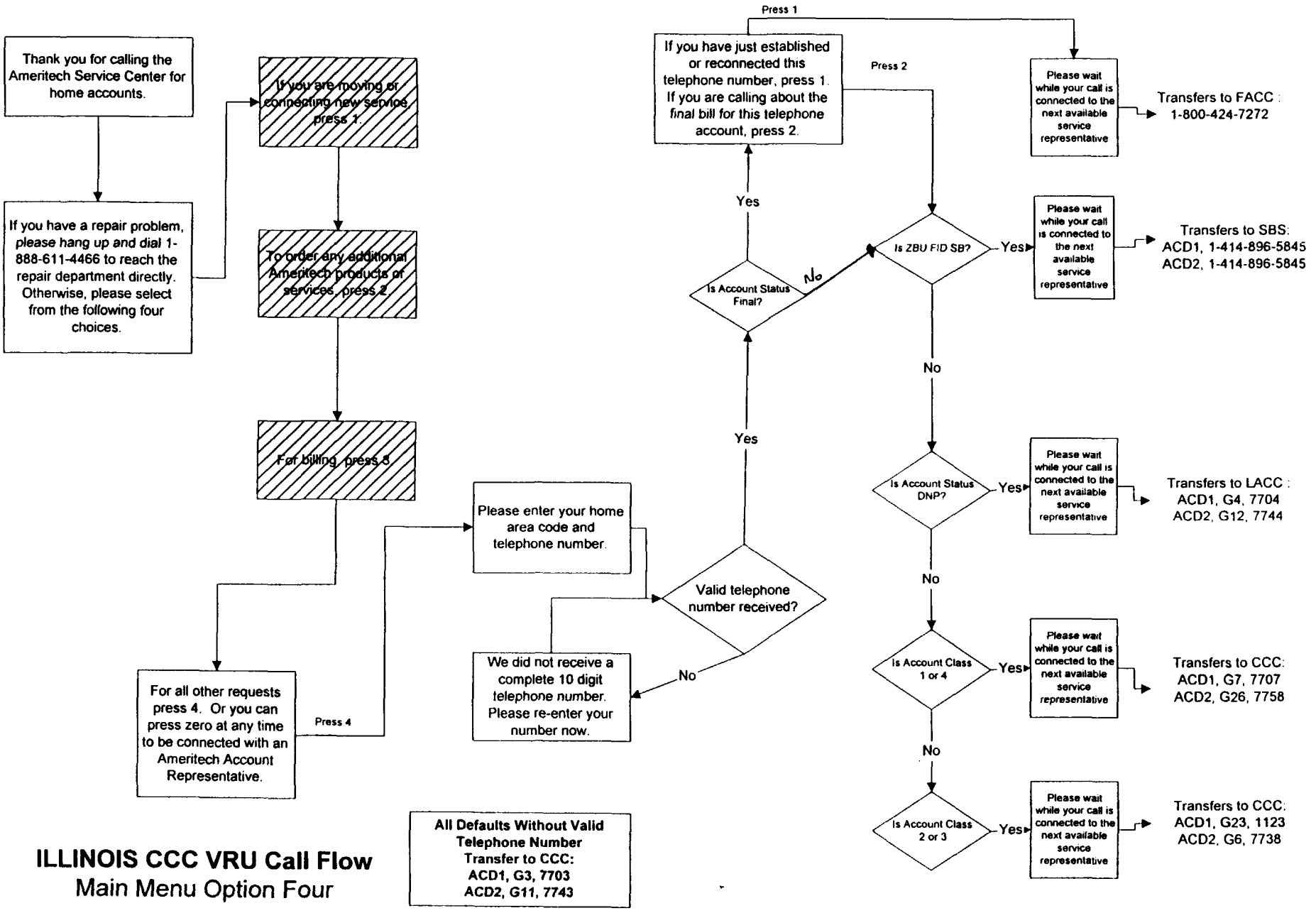


ILLINOIS CCC VRU Call Flow

Main Menu Option Two



ILLINOIS CCC VRU Call Flow
Main Menu Option Three



ILLINOIS CCC VRU Call Flow

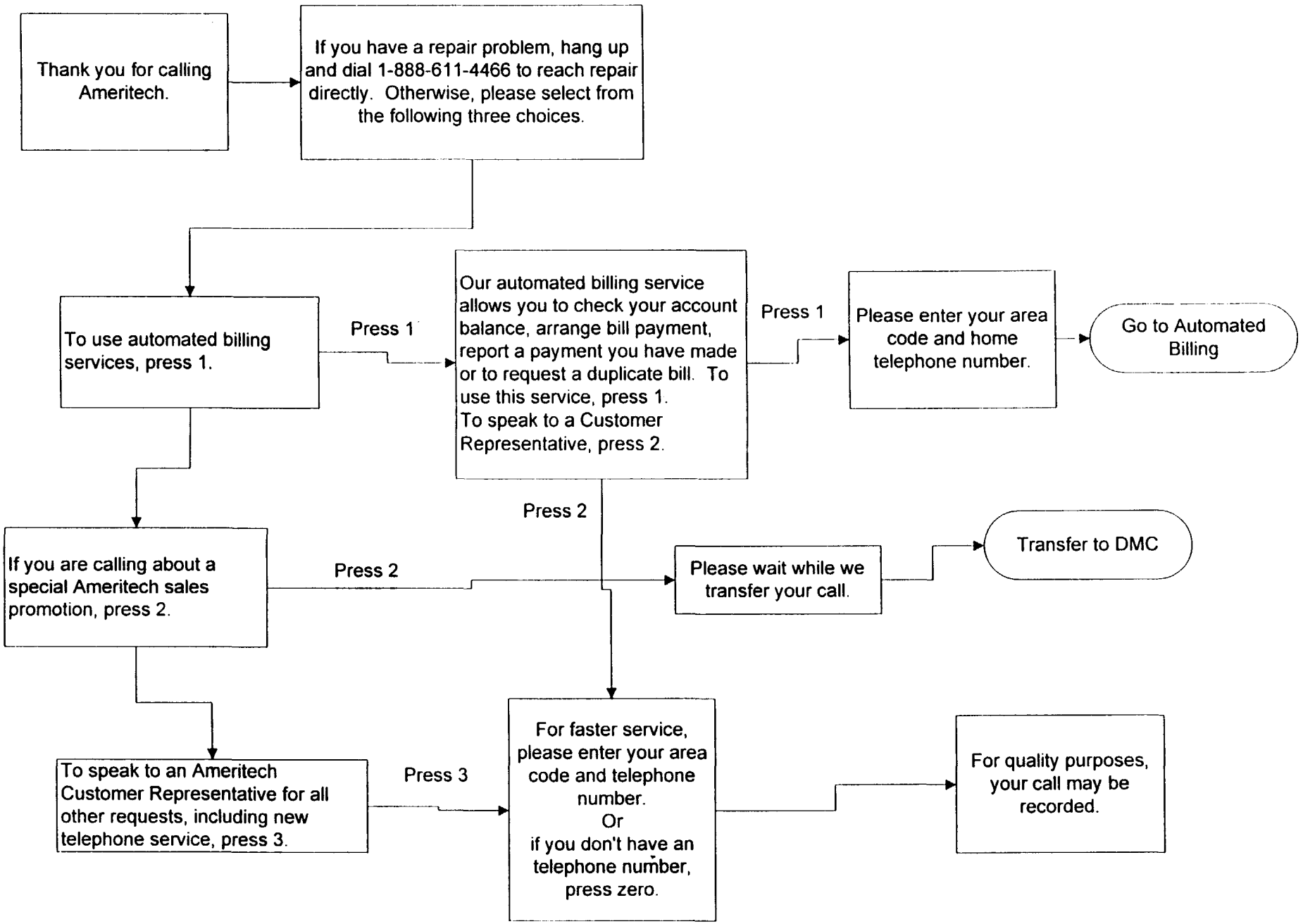
Main Menu Option Four

Call Flow Diagram Set #2

Because of the high customer dissatisfaction level and the excessive "zero-out" bypass associated with the VRU set-up used in the first half of 1997, Ameritech's consumer business unit redesigned the system. The redesigned call flow, implemented in July of this year, is depicted on the following page. Consumers have responded favorably to the increased "customer friendliness" of the new VRU system. Preliminary research indicates that, due to the simplified menu design, as many as 85 percent of all customers now remain within the VRU system.

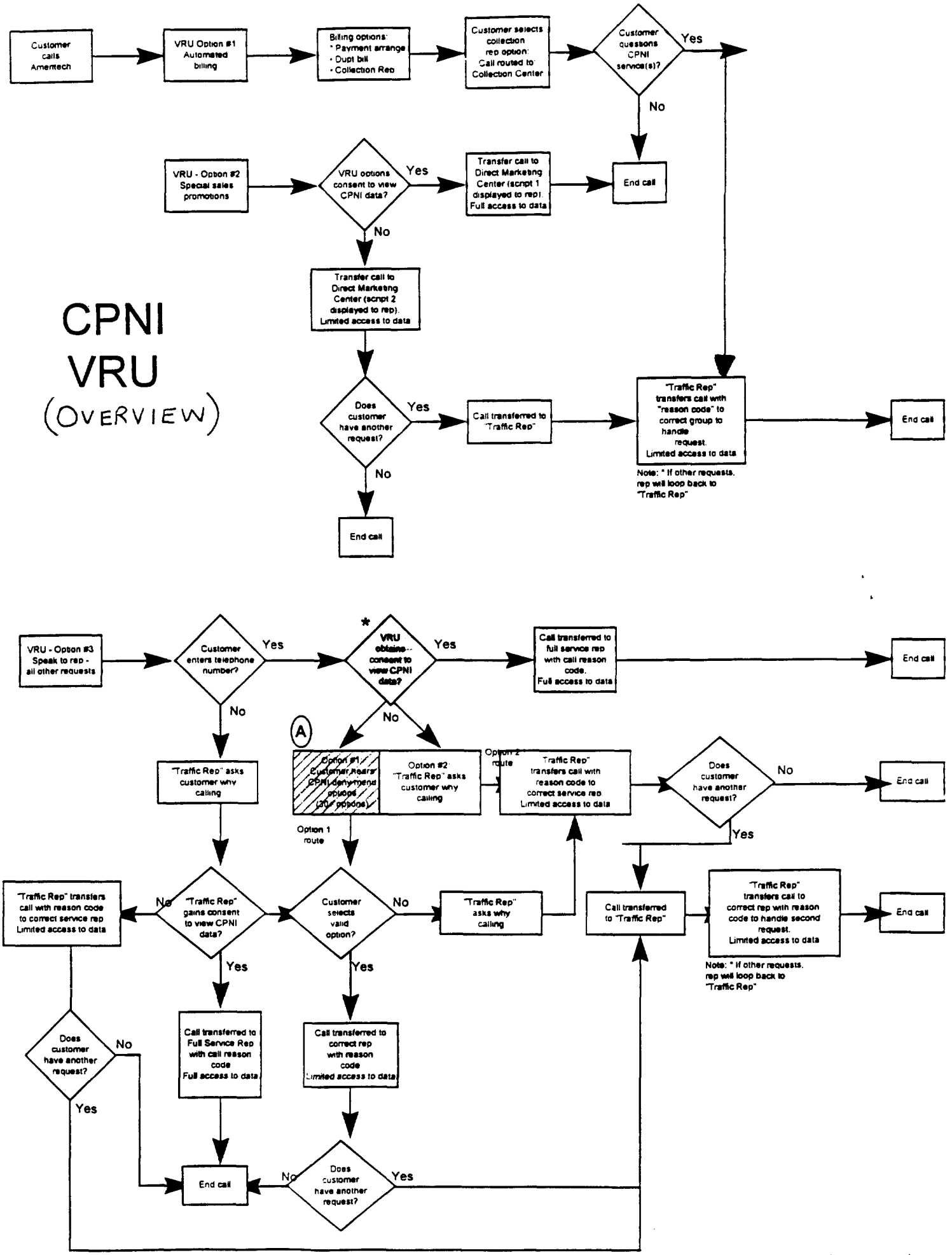
VRU #2

Customer First Call Flow - 7/23/97

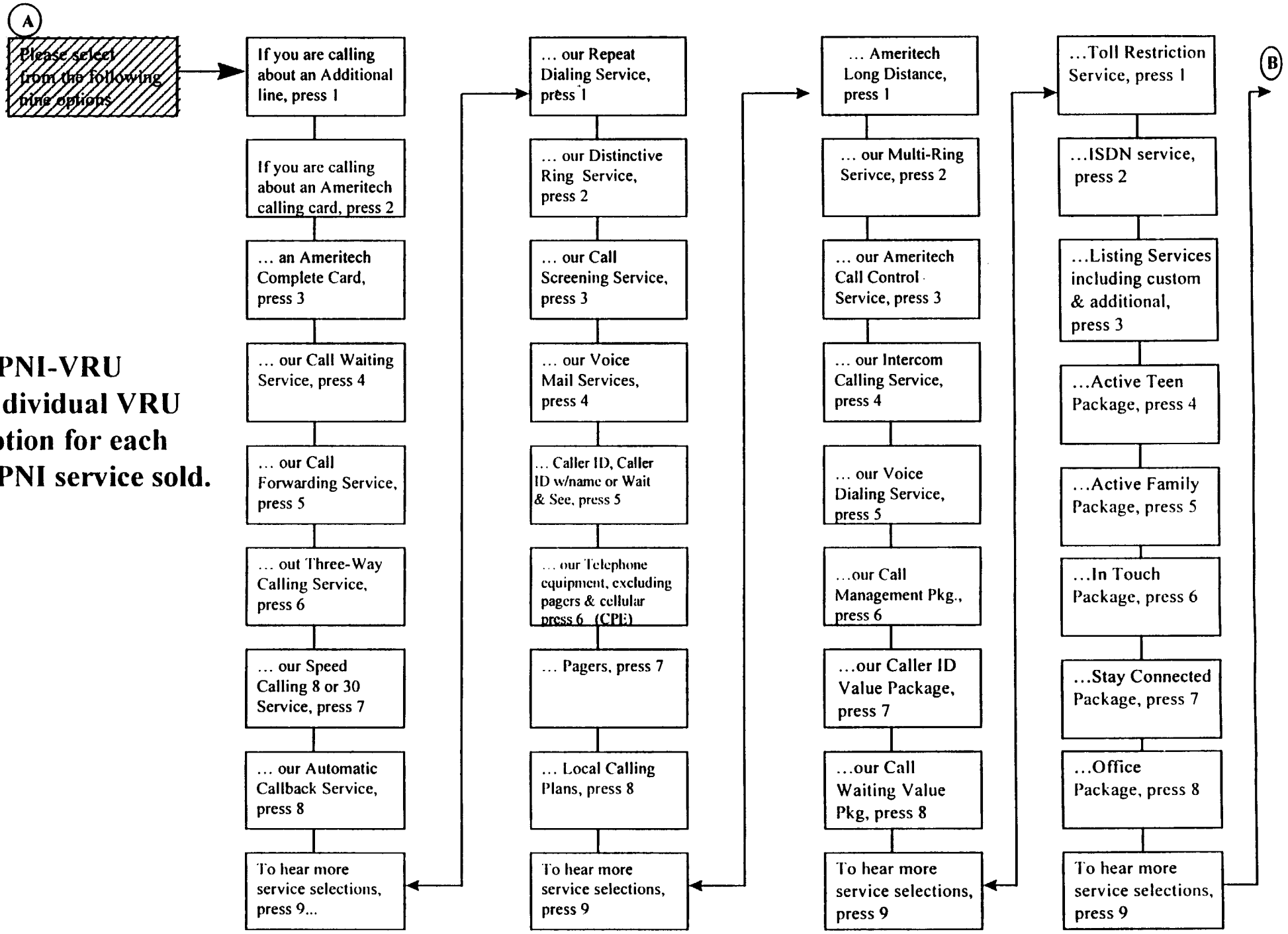


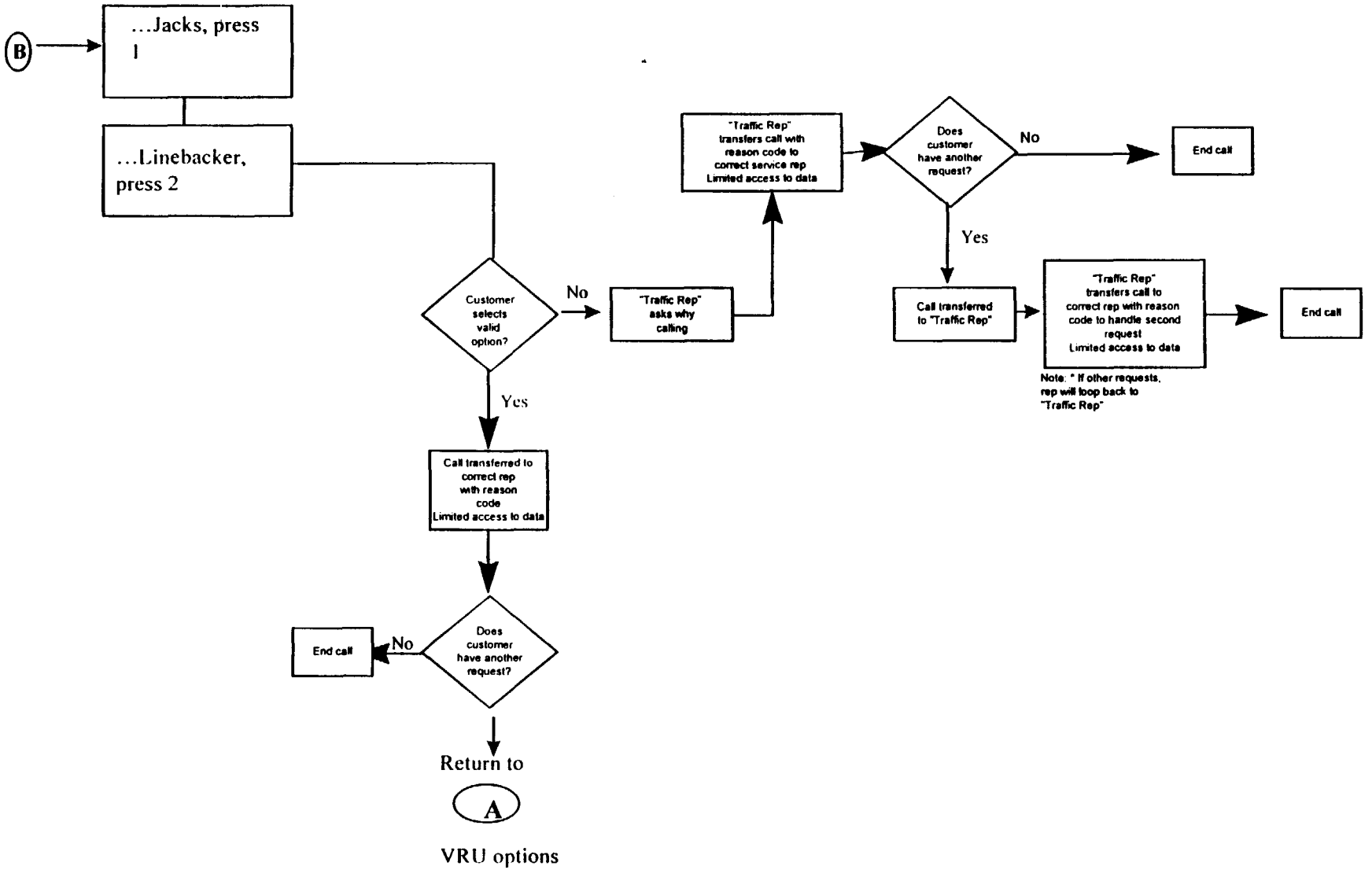
Call Flow Diagram Set #3

The following call flow diagrams depict the type of VRU menu prompts that Ameritech anticipates would have to be implemented to accommodate the mechanical blocking of CPNI suggested in the NPRM. These diagrams show a call flow even more complex than that used by Ameritech during the first half of 1997 and eliminated due to significant customer dissatisfaction.


CPNI
VRU
(OVERVIEW)
Customer calls Ameritech
VRU Option #1 Automated billing
Billing options: * Payment arrange * Dupl bill * Collection Req
Customer selects collection rep option: Call routed to Collection Center
Customer questions CPNI service(s)?
Yes
No
VRU - Option #2 Special sales promotions
VRU options consent to view CPNI data?
Yes
No
Transfer call to Direct Marketing Center (script 1 displayed to rep). Full access to data
End call
Transfer call to Direct Marketing Center (script 2 displayed to rep). Limited access to data
Does customer have another request?
Yes
No
Call transferred to "Traffic Rep"
"Traffic Rep" transfers call with "reason code" to correct group to handle request. Limited access to data
Note: * If other requests, rep will loop back to "Traffic Rep"
End call
VRU - Option #3 Speak to rep - all other requests
Customer enters telephone number?
Yes
No
*
VRU obtains consent to view CPNI data?
Yes
No
Call transferred to full service rep with call reason code. Full access to data
End call
A
"Traffic Rep" asks customer why calling
Option #1 Customer hears CPNI deny/grant options (3 or 4 options)
Option #2 "Traffic Rep" asks customer why calling
Option 2 route
"Traffic Rep" transfers call with reason code to correct service rep Limited access to data
Does customer have another request?
No
End call
Yes
Option 1 route
"Traffic Rep" transfers call with reason code to correct service rep Limited access to data
No
"Traffic Rep" gains consent to view CPNI data?
Customer selects valid option?
No
"Traffic Rep" asks why calling
Call transferred to "Traffic Rep"
"Traffic Rep" transfers call to correct rep with reason code to handle second request. Limited access to data
End call
Note: * If other requests, rep will loop back to "Traffic Rep"
Yes
Yes
Does customer have another request?
No
Yes
Call transferred to Full Service Rep with call reason code Full access to data
Call transferred to correct rep with reason code Limited access to data
End call
No
Does customer have another request?
Yes

CPNI-VRU Individual VRU option for each CPNI service sold.




B
...Jacks, press 1
...Linebacker, press 2
Customer selects valid option?
No
"Traffic Rep" asks why calling
"Traffic Rep" transfers call with reason code to correct service rep Limited access to data
Does customer have another request?
No
End call
Yes
Call transferred to "Traffic Rep"
"Traffic Rep" transfers call to correct rep with reason code to handle second request Limited access to data
End call
Note: * If other requests, rep will loop back to "Traffic Rep"
Yes
Call transferred to correct rep with reason code Limited access to data
Does customer have another request?
No
End call
Return to
A
VRU options

IMPACTS OF IMPLEMENTING MECHANICAL CPNI BLOCKING

Assumptions

The customer satisfaction survey results summarized in Attachment C and the "global consent" data summarized in Attachment D were used to estimate customer impacts, as well as company impacts due to VRU avoidance and call transfers.

The projected costs in terms of additional call handling time and human resources required to accommodate mechanical CPNI blocking assume that current call response service levels, representative productivity (percentage of time actually on-line with customers) and call volumes remain constant.

Customer Impacts of Mechanical CPNI Blocking
Implemented for Discrete "Telecommunications Services"

- Customers will experience more call transfers, resulting in greater call duration and the need to talk to multiple representatives during the call. This is counter to clearly expressed customer preferences for shorter calls, ease of reaching the right person and single contact resolution.

- Representatives will not be able to effectively recognize customer needs if they can't review the products and services that a customer currently has. The representatives won't be able to proactively offer complimentary services or packages (for example, calling plans or groupings of central office features), may not be able to recognize that a requested service is incompatible with those already used by the customer (for example, multi-ring service is not available if distinctive ringing or call forwarding is already installed), and won't be able to determine if a customer already has a particular service so as to not offer it to the customer again.

- If a customer moves to a new location requiring a new telephone number, the customer might be required to be treated as "new" rather than "existing." In such a case, the representative might be prohibited from reviewing all products and services comprising the existing account. The customer would have to review and perhaps remember all such products and services, reciting them to the representative so as to generate the new order. In addition to being extremely unfriendly, this process would produce far longer, less efficient calls.

- If, because of mechanized CPNI blocking, a customer's call must be routed to more than one representative, and if each places an order for the customer, a "pending order error" can result. When this happens each order is held up pending completion of the other order, resulting in sugnificant customer dissatisfaction and resource consumption.

Company impacts

Cost Impact Summary

Implementation costs of processes/systems:	***$ 44,152,602***
Annual increased costs for maintenance/support:	***$ 20,021,273***

- Increased labor costs - need independent group to handle CPNI consent, and call reason transfers. Addditionally, increased facility costs will be incurred to accommodate additional staff members and additional front-line associates needed to support the processes. **Results in increased costs of $17,646,993 annually**. (See attachment A for detailed cost information).

- Increased hardware costs due to need for additional call switching requirements (call transfers result in truck lines being tied up for duration of call), and increased development/testing costs for enhancements to the VRU systems. . **Results in implementation costs of $1,156,669**. (See attachment B for detailed cost information).

- Increased software development, deployment and maintenance costs for modifications to VRU, and desktop systems. **Results in implementation costs of $42,995,933, and an estimated 36 months for complete deployment. Ongoing support results in increased costs of 2,374,280 annually.** (See attachment B for detailed cost information).

- Loss of capability to upsell on all appropriate calls results in loss of revenue.

- Inefficiencies will be realized due to the inability to utilize the same pool of representatives to provide both billing services and sales support.

- Additional training time for all reps at implementation of new systems capabilities may also impact headcount costs to sustain service level commitments while reps are off-line attending training sessions. These costs would vary dependent on service levels at the time of impelmentation.

Attachment A
Resource Costs for CPNI implemention

Increased call handling time	Monthly Number of calls effected	Head-count needed	Monthly cost per additional head*	Total extended monthly cost	Initial facilities cost for headcount	Total Cost (Monthly plus start-up)	Annual Cost
"Traffic" associates needed to handle VRU noncompliance (zero out) and/or deny CPNI consent. Increased call handling time is broken down as follows: 15 seconds to ask for CPNI consent, 15 seconds to obtain call reason, and 15 seconds to transfer call.	With our original VRU, 40% of callers did not utilize the VRU. CPNI VRU is much more complicated, so estimate is that an additional 20% of callers will zero out of the VRU. This results in 60% of 3,682,669 calls being affected.						
45 seconds	2,209,601 calls monthly	291	$4,652	$1,353,732	$20,811	$1,374,543	$16,265,595
	26,515,212 calls annually						
"Traffic" associates needed to handle specific CPNI VRU noncompliance (30 or more options). Increased handling time is broken down as follows: 15 seconds to obtain call reason, and 15 seconds to transfer call.	Assuming 60% VRU noncompliance on use of the CPNI specific VRU. 10% of customers will be routed to this VRU due to CPNI consent denial. This results in 6% of 3,682,669 calls being affected.						
30 seconds	220,960 calls monthly	20	$4,652	$93,040	$20,811	$113,851	$1,137,291
	2,651,520 calls annually						
Transfers to different reps for customers that request additional services/products, but have not consented to CPNI for the contact. .Additional handling time to perform each transfer is 15 seconds. Average number of transfers is 2 per call ***	10% of customers deny CPNI consent; 10% of customers call for more than one reason; therefore affected calls will be 1% of the monthly average of 3,682,669 calls.						
30 seconds	36,827 calls monhly	4	$4,652	$18,608	$20,811	$39,419	$244,107
	441,924 calls annually						
TOTALS		***315***	***$4,652***	***$1,465,380***	***$20,811***	***$1,486,191***	***$17,646,993***
***Estimates based on 2 transfers per call. With the implementation of 30 or more options, the number of transfers, along with handling time and cost estimates, will be greatly increased.							

*Annual loaded salary cost for one headcount = $50,000 ($4167 per month)
*Monthly facilities cost per headcount = $485

ATTACHMENT B

CPNI Rules Compliance — Implications for Information Systems

Objective: Implement automated 'blocking' of CPNI data during customer service and sales related contacts, unless customer consents to the use of this information.

Requirements: Inbound Customer Calls

- Solicit customer consent for use of CPNI data, and save the customer's response for the duration of the call only.
- If consent is obtained (estimated at 90% of calls based on historical data), existing systems infrastructure should presumably suffice.
- If consent is not obtained.
  - Calls must be 'passed', along with a non-consent indicator, to an appropriate Service Representative along with the nature of the customer's call (determined by customer's response to a number of prompts / questions).
  - Customized information screens should be displayed which present only the CPNI data necessary to answer the customer's specific request.

Technology Implications:

- Voice Response Unit (VRU): may need to build an automated consent-gathering / call routing menu (expect 30 or more menu options to be presented to customer) and automatically pass consent indicator and request type to a Service Representative's terminal. **Estimated high-level cost**: estimates depicted on attached spreadsheet are based on past initiatives to completely modify the VRU. Estimates include design, programming, recording, and testing.

- Customer Service Display Screens: re-write existing graphical front-end customer service systems to add the following:
  - accept CPNI consent indicator and customer request type (30 or more request types available) from VRU and/or another person.
  - build a customized screen for each request type, displaying only the CPNI data necessary to answer the customer's specific request. The estimated time to design and develop these systems is 12 months.
  - **Estimated high-level cost**: The estimates depicted in the attached spreadsheet are based on current business efforts that are required to develop/implement system enhancements in our current environment and to support the significantly more complex testing of each monthly software release.

Technology Implications - continued

- Corporate Billing Inquiry and Order-Taking Systems: since these systems do not filter the display of CPNI data in any way, and a Service Representative can use these systems directly without using the above-mentioned graphical front-end systems, they must also be re-written to similarly filter CPNI data based on request type (in fact a graphical front-end system is not available for taking Consumer customer orders). The estimated time to design and develop these systems is 36 months.

  . **Estimated high-level cost**: estimates depicted on the attached spreadsheet were derived from a project plan that was created to design and develop a new order entry system, and from past experience in developing and deploying a new billing inquiry system. The new order entry system project was not approved due to cost estimates being too high, and not justified by expected benefits.

CPNI Compliance Cost Estimates for Information Systems

FUNCTION	*Loaded Annual Salary Cost*	*Number of this position needed*	*Annual cost*	*Number of years*	*Total Cost*
VRU ENHANCEMENTS					
HEADCOUNT -SYSTEM DESIGN AND IMPLEMENTATION	104,446	3	313,338	0.5	156,669
HARDWARE/SOFTWARE ENHANCEMENTS					1,000,000
TOTALS FOR VRU ENHANCEMENTS					***1,156,669***
CUSTOMER SERVICE DISPLAY SCREEN ENHANCEMENTS					
HEADCOUNT - SYSTEM DESIGN AND IMPLEMENTATION					
Project leader	119,495	1	119,495	1	119,495
Business analyst	104,446	1	104,446	1	104,446
Systems analyst	104,446	1	104,446	1	104,446
Programmer	104,446	3	313,338	1	313,338
Testing analyst	76,916	2	153,832	1	153,832
Project administrator	70,266	1	70,266	1	70,266
Software Release manager	84,965	1	84,965	1	84,965
Ongoing maintanence/support	94,964	3	284,892	ONGOING	284,892 PER YEAR
TOTALSYSTEMS HEADCOUNT	***959,354***	***19***	***1,824,428***	***1 FOR DEVELOPMENT; ONGOING SUPPORT***	***1,235,680***
METHODS AND PROCEDURES DEVELOPMENT/SUPPORT					
M&P developers	104,446	2	208,892	1	208,892
Trainers	94,964	4	379,856	1	379,856
Representative training (reps off-line for 2 days)	417	5000	2,085,000	ONGOING	2,085,000
Field support	94,964	2	189,928	ONGOING	189,928
TOTAL M&P/TRAINING HEADCOUNT	***199,827***	***5006***	***2,673,748***		***2,863,676***

TOTAL SOFTWARE/HARDWARE/ FACILITIES				***ONGOING PER YEAR COST***	***1,500,000***
TOTALS FOR CUSTOMER SERVICE DISPLAY SCREEN ENHANCEMENTS					***5,599,356***
CORPORATE BILLING INQUIRY AND ORDER PROCESSING SYSTEMS					
HEADCOUNT					
Project leader	119,495	3	358,485	3	1,075,455
Business analyst	104,446	10	1,044,460	3	3,133,380
Systems analyst	104,446	10	1,044,460	3	3,133,380
Programmer	104,446	30	3,133,380	3	9,400,140
Testing analyst	76,916	10	769,160	3	2,307,480
Project administrator	70,266	2	140,532	3	421,596
Software Release manager	84,965	6	509,790	3	1,529,370
Ongoing maintanence/support	94,964	18	1,709,352	ONGOING	1,709,532
TOTAL HEADCOUNT	***759,944***	***89***	***8,709,619***	***1 FOR DEVELOPMENT; ONGOING SUPPORT***	***22,710,333***
METHODS AND PROCEDURES DEVELOPMENT/SUPPORT					
M&P developers	104,446	6	626,676	1	626,676
Trainers	94,964	8	759,712	1	759,712
Representative training (reps off-line for 2 days weeks)	2,084	5000	10,420,000	1	10,420,000
Field support	94,964	4	379,856	ONGOING	379,856
TOTAL M&P/TRAINING HEADCOUNT	***201,494***	***5014***	***11,806,388***		***12,186,244***
TOTAL SOFTWARE/HARDWARE/ FACILITIES				***ONGOING PER YEAR COST***	***2,500,000***
TOTAL COSTS CORPORATE BILLING INQUIRY AND ORDER PROCESSING SYSTEMS					***37,396,577***

IMPLEMENTATION COSTS FOR ALL SYSTEMS/TECHNOLOGY CHANGES				***44,152,602***